

## Background

- Emotional eating (EE) is a dysfunctional eating behavior characterized by eating due to an inability to cope with negative emotions.
  - EE has been linked with twice the odds of obesity, central obesity, and type 2 diabetes in US Latino adults.
- EE is prevalent in US Latino adults:
  - 62% report some level of EE.
- Current studies fail to understand positive and protective factors that may ameliorate EE.
  - Understanding positive and protective factors may shed light onto novel interventions focused on adaptive coping.
- Optimism has been consistently associated with favorable health outcomes, including healthier cardiometabolic profile and behaviors.
- However, research on optimism and EE is underdeveloped.
  - Only two studies have evaluated the link between optimism and EE and reported mixed findings.
  - None of them focused on US Latino adults, a population disproportionately exposed to adversity and stressors.

## Objective

- To examine the association between optimism and EE in a sample of US Latino adults.

## Methods

- Cross-sectional analysis; Latino Health and Well-Being Study

### Subjects

- Latino participants recruited from the Greater Lawrence Family Health Center (Lawrence, MA) between the ages of 21-84 years.
- This analysis excluded pregnant women and participants with missing data on optimism, EE and covariates.

### Procedure

- Participants completed standardized interviews that included socio-demographics, optimism, EE, health behaviors, depression symptoms, and anthropometric measurements.

### Measures

- Optimism: measured with the positive items of Life Orientation Test- Revised version.
  - Categorized in tertiles: Low, Moderate, and High
- EE: measured with Three Factor Eating Questionnaire R18-V2.
  - Response options: definitely false - definitely true.
  - Score range: 1-4
  - Categorized as:
    - No EE= answering definitely false to all items
    - Low EE= score at or below the median (1.83)
    - High EE= score above the median (1.83)
- Covariates: age, sex, smoking, marital status, education, Latinx heritage group (i.e., Puerto Rican, Dominican, and other), employment status, physical activity, depression symptoms (CESD) and body mass index (BMI).

### Statistical analyses

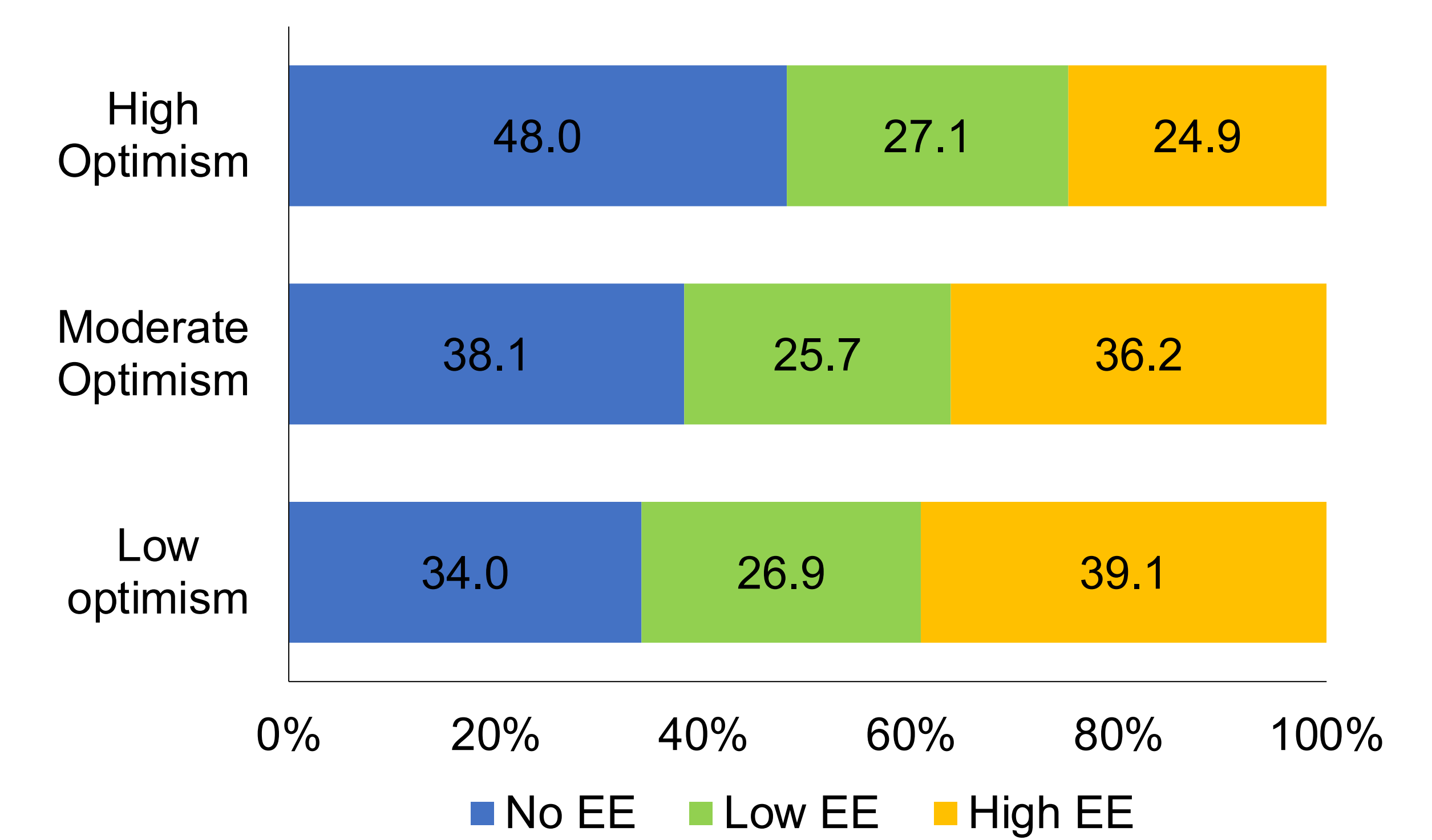
- Chi-square tests for the bivariate association between optimism and EE.
- Prevalence Ratios: adjusted Poisson regression models with robust variance error.
  - Adjusted for age, sex, marital status, education, Latino heritage group, employment status, physical activity, smoking, depression symptoms, and BMI.
- Significance was set at  $p < 0.05$ .

## Results

**Table 1. Sample characteristics of the Latino Health and Well-being Study by level of optimism (n=579).**

	Low optimism (T1) n=297 (51.3%)	Moderate optimism (T2) n=105 (18.1%)	High optimism (T3) n=177 (30.6%)	p value
<b>Age; mean (SD)</b>	46.2 (15.7)	48.6 (15.2)	47.0 (15.1)	0.4
<b>Female; n (%)</b>	142 (47.8)	53 (50.5)	92 (52.0)	0.7
<b>Education; n (%)</b>				0.9
< High school	152 (51.1)	57 (54.2)	87 (49.2)	
High school graduate	59 (19.9)	22 (21.0)	35 (19.8)	
Some college or higher	86 (29.0)	26 (24.8)	55 (31.1)	
<b>Married; n (%)</b>	120 (40.4)	44 (41.9)	85 (48.0)	0.3
<b>Latino Heritage group; n (%)</b>				0.2
Dominican	214 (72.1)	75 (71.4)	137 (77.4)	
Puerto Rican	63 (20.9)	23 (21.9)	23 (13.0)	
Other	21 (7.0)	7 (6.7)	17 (9.6)	
<b>Employment</b>				0.02
Employed	186 (62.6)	50 (47.6)	110 (62.2)	
Unemployed	111 (37.4)	55 (52.4)	67 (37.9)	
<b>Current smoker; n (%)</b>	45 (15.2)	7 (6.7)	17 (9.6)	0.04
<b>Meets physical activity guidelines; n (%)</b>	100 (33.7)	48 (45.7)	96 (54.2)	<0.001
<b>BMI (kg/m<sup>2</sup>); mean (SD)</b>	30.1 (5.8)	29.6 (5.9)	29.3 (6.3)	0.4
<b>CESD; mean (SD)</b>	17.4 (14.4)	16.4 (13.9)	14.5 (12.3)	0.09

**Figure 1. Prevalence of EE levels by tertile of optimism in the Latino Health and Well-being Study.**



p value from Chi-square test = 0.02

**Table 2. Association between Optimism and EE in the Latino Health and Well-being Study.**

	Low EE PR (95%CI)	High EE PR (95%CI)
Low optimism	Reference	Reference
Moderate optimism	0.94 (0.67-1.31)	0.96 (0.75-1.22)
High optimism	0.82 (0.61-1.08)	0.69 (0.53-0.89)*

\* $p < 0.05$ . Adjusted estimates from Poisson regression models with robust variance.

PR=Prevalence ratio. 95% CI= 95% Confidence Interval.

Low optimism (tertile 1) and no EE groups are reference categories.

## Discussion

- To our knowledge, this is the first study that evaluates the association between optimism and EE in US Latino adults.
- High levels of optimism were negatively associated with high EE in US Latino adults.
  - In agreement with one prior study in French adult men and women.
- Optimism may protect against dysfunctional eating behaviors, like EE, by allowing to implement better coping strategies and having favorable emotional responses to adversity and stressors.
  - Individuals with optimism may have a greater sense of mastery and may be more likely to seek support from others
  - Optimism is negatively associated with psychological stress and depression; important predictors of EE.
- Optimism may be a novel intervention target for prevention of EE among US Latino adults.
  - Effective intervention approaches include; Best Possible Self, self-compassion, mindfulness, and cognitive behavioral therapy models.
  - However, the studies showing increases in optimism with psychological interventions have mainly focused on European countries and non-Latino US samples.
- Our results suggest:
  - Optimism may serve as a protective factor against EE
- Study limitations:
  - Cross-sectional analysis.
  - Primarily generalizable to Latino adults of Caribbean descent in the mainland US.
- Study strengths:
  - Contributes to the limited body of literature on optimism and EE.
  - Uses two commonly used and valid instruments to measure optimism and EE.
  - Focused on a population at high risk of cardiometabolic diseases.
  - Adjusting for depression supports our conclusions on the need for interventions to promote optimism.

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